

<110> Japan Science and Technology Agency Tsukasa SEYA Misako MATSUMOTO Hiroyuki OSHIUMI

- <120> Novel Adaptor Protein that Binds to Mammalian Toll-Like Receptor 3, and Gene Thereof
- <130> 1035-591 / A211-02/PCT
- <140> US 10/536,802
- <141> 2005-09-22
- <150> PCT/JP2003/014854
- <151> 2003-11-20
- <150> JP 2002-349015
- <151> 2002-11-29
- <160> 4
- <170> MS Word
- <210> 1
- <211> 2460
- <212> DNA
- <213> Homo sapiens
- <220>
- <221> CDS
- <222> (63)..(2198)
- <400> 1
- gtgtggaaca tgccttcacc acctccagct tctgctgccg gaggctgcac ccacctgtgc 60
- cc atg gcc tgc aca ggc cca tca ctt cct agc gcc ttc gac att cta 107
 Met Ala Cys Thr Gly Pro Ser Leu Pro Ser Ala Phe Asp Ile Leu
 1 5 10 15
- ggt gca gca ggc cag gac aag ctc ttg tat ctg aag cac aaa ctg aag 155
 Gly Ala Ala Gly Gln Asp Lys Leu Leu Tyr Leu Lys His Lys Leu Lys
 20 25 30
- acc cca cgc cca ggc tgc cag ggg cag gac ctc ctg cat gcc atg gtt 203
 Thr Pro Arg Pro Gly Cys Gln Gly Gln Asp Leu Leu His Ala Met Val
 35 40 45
- ctc ctg aag ctg ggc cag gaa act gag gcc agg atc tct cta gag gca 251 Leu Leu Lys Leu Gly Gln Glu Thr Glu Ala Arg Ile Ser Leu Glu Ala 50 55 60
- ttg aag gcc gat gcg gtg gcc cgg ctg gtg gcc cgc cag tgg gct ggc 299
 Leu Lys Ala Asp Ala Val Ala Arg Leu Val Ala Arg Gln Trp Ala Gly
 65 70 75

				gag Glu									347
				tac Tyr 100									395
_	_		_	gtg Val	_	_	_	_	_	_		_	443
				cgg Arg									491
				att Ile									539
				tgc Cys									587
				cgc Arg 180									635
				tcc Ser									683
-		_	_	tcc Ser		_							731
				agc Ser									779
				ccc Pro									827
				gag Glu 260									875
				ccc Pro	_	 _		-	-				923
	-			gca Ala	-	-		_					971

			tct ctc ccc Ser Leu Pro 315	_	
		_	aaa gac cag Lys Asp Gln 330		
_	-		aat acc aag Asn Thr Lys 345		
	_		cct cct cct Pro Pro Pro		
	-		acc ccc tcc Thr Pro Ser		
_	=		aaa ttc tat Lys Phe Tyr 395		
			gcc ctg cgg Ala Leu Arg 410		
			gcc acc ttc Ala Thr Phe 425		
			tgc ctg cag Cys Leu Gln		
			acc tcc aac Thr Ser Asn		
			atg atg agc Met Met Ser 475		
		_	ttc ctg ccc Phe Leu Pro 490		
	_		agc ctg ctc Ser Leu Leu 505		
			gcc agg aag Ala Arg Lys		

ttc aag ccc cac agg ctt cag gcc cga aag gcc atg tgg agg aag gaa Phe Lys Pro His Arg Leu Gln Ala Arg Lys Ala Met Trp Arg Lys Glu 530 535 540	1691
cag gac acc cga gcc ctg cgg gaa cag agc caa cac ctg gac ggt gag Gln Asp Thr Arg Ala Leu Arg Glu Gln Ser Gln His Leu Asp Gly Glu 545 550 555	1739
cgg atg cag gcg gca ctg aac gca gcc tac tca gcc tac ctc cag Arg Met Gln Ala Ala Ala Leu Asn Ala Ala Tyr Ser Ala Tyr Leu Gln 560 565 570 575	1787
agc tac ttg tcc tac cag gca cag atg gag cag ctc cag gtg gct ttt Ser Tyr Leu Ser Tyr Gln Ala Gln Met Glu Gln Leu Gln Val Ala Phe 580 585 590	1835
ggg agc cac atg tca ttt ggg act ggg gcg ccc tat ggg gct cga atg Gly Ser His Met Ser Phe Gly Thr Gly Ala Pro Tyr Gly Ala Arg Met 595 600 605	1883
ccc ttt ggg ggc cag gtg ccc ctg gga gcc ccg cca ccc ttt ccc act Pro Phe Gly Gln Val Pro Leu Gly Ala Pro Pro Pro Phe Pro Thr 610 615 620	1931
tgg ccg ggg tgc ccg cag ccg cca ccc ctg cac gca tgg cag gct ggc Trp Pro Gly Cys Pro Gln Pro Pro Pro Leu His Ala Trp Gln Ala Gly 625 630 635	1979
acc ccc cca ccg ccc tcc cca cag cca gca gcc ttt cca cag tca ctgThr Pro Pro Pro Pro Ser Pro Gln Pro Ala Ala Phe Pro Gln Ser Leu640645	2027
ccc ttc ccg cag tcc cca gcc ttc cct acg gcc tca ccc gca ccc cctPro Phe Pro Gln Ser Pro Ala Phe Pro Thr Ala Ser Pro Ala Pro Pro660665	2075
cag agc cca ggg ctg caa ccc ctc att atc cac cac gca cag atg gta Gln Ser Pro Gly Leu Gln Pro Leu Ile Ile His His Ala Gln Met Val 675 680 685	2123
cag ctg ggg ctg aac aac cac atg tgg aac cag aga ggg tcc cag gcg Gln Leu Gly Leu Asn Asn His Met Trp Asn Gln Arg Gly Ser Gln Ala 690 695 700	2171
ccc gag gac aag acg cag gag gca gaa tgaccgcgtg tccttgcctg Pro Glu Asp Lys Thr Gln Glu Ala Glu 705 710	2218
accacctggg gaacacccct ggacccaggc atcggccagg accccataga gcaccccggt	2278
ctgccctgtg ccctgtggac agtggaagat gaggtcatct gccactttca ggacattgtc	2338
cgggagccct tcatttagga caaaacgggc gcgatgatgc cctggctttc agggtggtca	2398
gaactggata cggtgtttac aattccaatc tctctatttc tgggtgaagg gtcttggtgg	2458
tg	2460

<210> 2

<211> 712

<212> PRT

<213> Homo sapiens

<400> 2

Met Ala Cys Thr Gly Pro Ser Leu Pro Ser Ala Phe Asp Ile Leu Gly
1 5 10 15

Ala Ala Gly Gln Asp Lys Leu Leu Tyr Leu Lys His Lys Leu Lys Thr

Pro Arg Pro Gly Cys Gln Gly Gln Asp Leu Leu His Ala Met Val Leu 35 40 45

Leu Lys Leu Gly Gln Glu Thr Glu Ala Arg Ile Ser Leu Glu Ala Leu 50 55 60

Lys Ala Asp Ala Val Ala Arg Leu Val Ala Arg Gln Trp Ala Gly Val 65 70 75 80

Asp Ser Thr Glu Asp Pro Glu Glu Pro Pro Asp Val Ser Trp Ala Val
85 90 95

Ala Arg Leu Tyr His Leu Leu Ala Glu Glu Lys Leu Cys Pro Ala Ser 100 105 110

Leu Arg Asp Val Ala Tyr Gln Glu Ala Val Arg Thr Leu Ser Ser Arg 115 120 125

Asp Asp His Arg Leu Gly Glu Leu Gln Asp Glu Ala Arg Asn Arg Cys 130 140

Gly Trp Asp Ile Ala Gly Asp Pro Gly Ser Ile Arg Thr Leu Gln Ser 145 150 155 160

Asn Leu Gly Cys Leu Pro Pro Ser Ser Ala Leu Pro Ser Gly Thr Arg 165 170 175

Ser Leu Pro Arg Pro Ile Asp Gly Val Ser Asp Trp Ser Gln Gly Cys 180 185 190

Ser Leu Arg Ser Thr Gly Ser Pro Ala Ser Leu Ala Ser Asn Leu Glu 195 200 205

Ile Ser Gln Ser Pro Thr Met Pro Phe Leu Ser Leu His Arg Ser Pro 210 215 220

His Gly Pro Ser Lys Leu Cys Asp Asp Pro Gln Ala Ser Leu Val Pro 225 230 235 240

Glu Pro Val Pro Gly Gly Cys Gln Glu Pro Glu Glu Met Ser Trp Pro 245 250 255

Pro Ser Gly Glu Ile Ala Ser Pro Pro Glu Leu Pro Ser Ser Pro Pro Pro Gly Leu Pro Glu Val Ala Pro Asp Ala Thr Ser Thr Gly Leu Pro Asp Thr Pro Ala Ala Pro Glu Thr Ser Thr Asn Tyr Pro Val Glu Cys Thr Glu Gly Ser Ala Gly Pro Gln Ser Leu Pro Leu Pro Ile Leu Glu Pro Val Lys Asn Pro Cys Ser Val Lys Asp Gln Thr Pro Leu Gln Leu Ser Val Glu Asp Thr Thr Ser Pro Asn Thr Lys Pro Cys Pro Pro Thr Pro Thr Thr Pro Glu Thr Ser Pro Pro Pro Pro Pro Pro Pro Pro Ser Ser Thr Pro Cys Ser Ala His Leu Thr Pro Ser Ser Leu Phe Pro Ser Ser Leu Glu Ser Ser Ser Glu Gln Lys Phe Tyr Asn Phe Val Ile Leu His Ala Arg Ala Asp Glu His Ile Ala Leu Arg Val Arg Glu Lys Leu Glu Ala Leu Gly Val Pro Asp Gly Ala Thr Phe Cys Glu Asp Phe Gln Val Pro Gly Arg Gly Glu Leu Ser Cys Leu Gln Asp Ala Ile Asp His Ser Ala Phe Ile Ile Leu Leu Thr Ser Asn Phe Asp Cys Arg Leu Ser Leu His Gln Val Asn Gln Ala Met Met Ser Asn Leu Thr Arg Gln Gly Ser Pro Asp Cys Val Ile Pro Phe Leu Pro Leu Glu Ser Ser Pro Ala Gln Leu Ser Ser Asp Thr Ala Ser Leu Leu Ser Gly Leu Val Arg Leu Asp Glu His Ser Gln Ile Phe Ala Arg Lys Val Ala Asn Thr Phe Lys Pro His Arg Leu Gln Ala Arg Lys Ala Met Trp Arg Lys Glu Gln Asp Thr Arg Ala Leu Arg Glu Gln Ser Gln His Leu Asp Gly Glu Arg

Met	Gln	Ala	Ala	Ala 565	Leu	Asn	Ala	Ala	Туг 570	Ser	Ala	Туr	Leu	Gln 575	Ser	
Tyr	Leu	Ser	Tyr 580	Gln	Ala	Gln	Met	Glu 585	Gln	Leu	Gln	Val	Ala 590	Phe	Gly	
Ser	His	Met 595	Ser	Phe	Gly	Thr	Gly 600	Ala	Pro	Tyr	Gly	Ala 605	Arg	Met	Pro	
Phe	Gly 610	Gly	Gln	Val	Pro	Leu 615	Gly	Ala	Pro	Pro	Pro 620	Phe	Pro	Thr	Trp	
Pro 625	Gly	Cys	Pro	Gln	Pro 630	Pro	Pro	Leu	His	Ala 635	Trp	Gln	Ala	Gly	Thr 640	
Pro	Pro	Pro	Pro	Ser 645	Pro	Gln	Pro	Ala	Ala 650	Phe	Pro	Gln	Ser	Leu 655	Pro	
Phe	Pro	Gln	Ser 660	Pro	Ala	Phe	Pro	Thr 665	Ala	Ser	Pro	Ala	Pro 670	Pro	Gln	
Ser	Pro	Gly 675	Leu	Gln	Pro	Leu	Ile 680	Ile	His	His	Ala	Gln 685	Met	Val	Gln	
Leu	Gly 690	Leu	Asn	Asn	His	Met 695	Trp	Asn	Gln	Arg	Gly 700	Ser	Gln	Ala	Pro	
Glu 705	Asp	Lys	Thr	Gln	Glu 710	Ala	Glu									
<21 <21	0> 3 1> 2: 2> DI 3> Mi	AV	uscu)	lus												
	0> 1> Cl 2> ()		. (22	51)												
	0> 3 gttc	gga a	acat	gtct	cc a	ccca	cccc	a cc	ctct	gtgg	ctc	cagg	ctt (catt	ctcccc	60
cat										rg G					tt cta le Leu 15	110
	gcc Ala															158
	ctg Leu															206

		ctg Leu													254
_	-	aac Asn		-	_	_	_	_	_		_		-		302
		aca Thr													350
 -	-	ctg Leu			_	_	_				_	_	_	-	398
		gac Asp 115													446
		cac His													494
		gat Asp		-		_			-						542
		ggt Gly		-	_							-			590
		cct Pro													638
		tcc Ser 195			_		_		_	_	_				686
_	_	tca Ser				-									734
		agc Ser	-		_			_	_	-		_			782
	_	cct Pro	_		_		_					_			830
		gag Glu		_	_							_		_	878

				tct Ser												926
				gac Asp												974
				tcc Ser												1022
				cct Pro			_	-				-				1070
	-	_		ctg Leu 340	_			_			_			_	_	1118
				caa Gln												1166
				ccg Pro												1214
				cac His												1262
				gcc Ala												1310
				acc Thr 420												1358
				ccc Pro		-			_							1406
	_		_	Gly		_		_		_		_	_		_	1454
_	_	_	_	ctg Leu						_		_		_		1502
	_			agg Arg	_	_	_									1550

_	tct Ser	_	_	_		_		_			_	_			_	1598
	gtg Val		_	_	_						_	_	_		_	1646
	acc Thr		_			_		_	_	_		_				1694
	gcg Ala 545	_		_	_			_		_	_		_	_		1742
	gag Glu															1790
	cat His	-			-			-		-						1838
-	ttt Phe		_				-						_			1886
	tgt Cys															1934
	ccc Pro 625															1982
	cag Gln						_									2030
_	tct Ser			_							-				_	2078
	cag Gln					-							_	_	_	2126
				~+~	aac	aat	cac	atg	tgg	ggc	cac	aca	ggg	gcc	cag	2174
-	cag Gln	_		-			His 695	Met	Trp	Gly	His	Thr 700	Gly	Ala	Gln	

ctg act gat cag ggc gaa ccc ctt ctt gag act cca gag tg Leu Thr Asp Gln Gly Glu Pro Leu Leu Glu Thr Pro Glu 720 725 730	gaccaggtt 2271
ggaccccacc tagatggcta gagtgaca	2299
<210> 4 <211> 732 <212> PRT <213> Mus musculus	
<400> 4 Met Asp Asn Pro Gly Pro Ser Leu Arg Gly Ala Phe Gly II 1 5 10	le Leu Gly 15
Ala Leu Glu Arg Asp Arg Leu Thr His Leu Lys His Lys Le	eu Gly Ser 30
Leu Cys Ser Gly Ser Gln Glu Ser Lys Leu Leu His Ala Me 35 40 45	et Val Leu
Leu Ala Leu Gly Gln Asp Thr Glu Ala Arg Val Ser Leu Gl 50 55 60	lu Ser Leu
Lys Met Asn Thr Val Ala Gln Leu Val Ala His Gln Trp Al 65 70 75	la Asp Met 80
Glu Thr Thr Glu Gly Pro Glu Glu Pro Pro Asp Leu Ser Tr 85 90	rp Thr Val 95
Ala Arg Leu Tyr His Leu Leu Ala Glu Glu Asn Leu Cys Pr 100 105 11	ro Ala Ser 10
Thr Arg Asp Met Ala Tyr Gln Val Ala Leu Arg Asp Phe Al 115 120 125	la Ser Gln
Gly Asp His Gln Leu Gly Gln Leu Gln Asn Glu Ala Trp As 130 135 140	sp Arg Cys
Ser Ser Asp Ile Lys Gly Asp Pro Ser Gly Phe Gln Pro Le 145 150 155	eu His Ser 160
His Gln Gly Ser Leu Gln Pro Pro Ser Ala Ser Pro Ala Va 165 170	al Thr Arg 175
Ser Gln Pro Arg Pro Ile Asp Thr Pro Asp Trp Ser Trp Gl 180 185 19	ly His Thr 90
Leu His Ser Thr Asn Ser Thr Ala Ser Leu Ala Ser His Le 195 200 205	eu Glu Ile
Ser Gln Ser Pro Thr Leu Ala Phe Leu Ser Ser His His Gl 210 215 220	ly Thr His
Gly Pro Ser Lys Leu Cys Asn Thr Pro Leu Asp Thr Gln Gl 225 230 235	lu Pro Gln 240

Leu	Val	Pro	Glu	Gly 245	Cys	Gln	Glu	Pro	Glu 250	Glu	Ile	Ser	Trp	Pro 255	Pro
Ser	Val	Glu	Thr 260	Ser	Val	Ser	Leu	Gly 265	Leu	Pro	His	Glu	Ile 270	Ser	Val
Pro	Glu	Val 275	Ser	Pro	Glu	Glu	Ala 280	Ser	Pro	Ile	Leu	Pro 285	Asp	Ala	Leu
Ala	Ala 290	Pro	Asp	Thr	Ser	Val 295	His	Cys	Pro	Ile	Glu 300	Cys	Thr	Glu	Leu
Ser 305	Thr	Asn	Ser	Arg	Ser 310	Pro	Leu	Thr	Ser	Thr 315	Thr	Glu	Ser	Val	Gly 320
Lys	Gln	Trp	Pro	Ile 325	Thr	Ser	Gln	Arg	Ser 330	Pro	Gln	Val	Pro	Val 335	Gly
Asp	Asp	Ser	Leu 340	Gln	Asn	Thr	Thr	Ser 345	Ser	Ser	Pro	Pro	Ala 350	Gln	Pro
Pro	Ser	Leu 355	Gln	Ala	Ser	Pro	Lys 360	Leu	Pro	Pro	Ser	Pro 365	Leu	Ser	Ser
Ala	Ser 370	Ser	Pro	Ser	Ser	Tyr 375	Pro	Ala	Pro	Pro	Thr 380	Ser	Thr	Ser	Pro
Val 385	Leu	Asp	His	Ser	Glu 390	Thr	Ser	Asp	Gln	Lys 395	Phe	Tyr	Asn	Phe	Val 400
Val	Ile	His	Ala	Arg 405	Ala	Asp	Glu	Gln	Val 410	Ala	Leu	Arg	Ile	Arg 415	Glu
Lys	Leu	Glu	Thr 420	Leu	Gly	Val	Pro	Asp 425	Gly	Ala	Thr	Phe	Cys 430	Glu	Glu
Phe	Gln	Val 435	Pro	Gly	Arg	Gly	Glu 440	Leu	His	Cys	Leu	Gln 445	Asp	Ala	Ile
Asp	His 450	Ser	Gly	Phe	Thr	Ile 455	Leu	Leu	Leu	Thr	Ala 460	Ser	Phe	Asp	Cys
Ser 465	Leu	Ser	Leu	His	Gln 470	Ile	Asn	His	Ala	Leu 475	Met	Asn	Ser	Leu	Thr 480
Gln	Ser	Gly	Arg	Gln 485	Asp	Cys	Val	Ile	Pro 490	Leu	Leu	Pro	Leu	Glu 495	Cys
Ser	Gln	Ala	Gln 500	Leu	Ser	Pro	Asp	Thr 505	Thr	Arg	Leu	Leu	His 510	Ser	Ile
Val	Trp	Leu 515	Asp	Glu	His	Ser	Pro 520	Ile	Phe	Ala	Arg	Lys 525	Val	Ala	Asn
Thr	Phe 530	Lys	Thr	Gln	Lys	Leu 535	Gln	Ala	Gln	Arg	Val 540	Arg	Trp	Lys	Lys

Ala 545	Gln	Glu	Ala	Arg	Thr 550	Leu	Lys	Glu	Gln	Ser 555	Ile	Gln	Leu	Glu	Ala 560
Glu	Arg	Gln	Asn	Val 565	Ala	Ala	Ile	Ser	Ala 570	Ala	Tyr	Thr	Ala	Tyr 575	Val
His	Ser	Tyr	Arg 580	Ala	Trp	Gln	Ala	Glu 585	Met	Asn	Lys	Leu	Gly 590	Val	Ala
Phe	Gly	Lys 595	Asn	Leu	Ser	Leu	Gly 600	Thr	Pro	Thr	Pro	Ser 605	Trp	Pro	Gly
Cys	Pro 610	Gln	Pro	Ile	Pro	Ser 615	His	Pro	Gln	Gly	Gly 620	Thr	Pro	Val	Phe
Pro 625	Tyr	Ser	Pro	Gln	Pro 630	Pro	Ser	Phe	Pro	Gln 635	Pro	Pro	Cys	Phe	Pro 640
Gln	Pro	Pro	Ser	Phe 645	Pro	Gln	Pro	Pro	Ser 650	Phe	Pro	Leu	Pro	Pro 655	Val
Ser	Ser	Pro	Gln 660	Ser	Gln	Ser	Phe	Pro 665	Ser	Ala	Ser	Ser	Pro 670	Ala	Pro
Gln	Thr	Pro 675	Gly	Pro	Gln	Pro	Leu 680	Ile	Ile	His	His	Ala 685	Gln	Met	Val
Gln	Leu 690	Gly	Val	Asn	Asn	His 695	Met	Trp	Gly	His	Thr 700	Gly	Ala	Gln	Ser
Ser 705	Asp	Asp	Lys	Thr	Glu 710	Cys	Ser	Glu	Asn	Pro 715	Cys	Met	Gly	Pro	Leu 720
Thr	Asp	Gln	Gly	Glu 725	Pro	Leu	Leu	Glu	Thr 730	Pro	Glu				